

### Overview

#### Models

Compaq NC6132 1000 SX Upgrade Module for NC3134 and NC3131  
338456-B23

With this Gigabit upgrade module for the NC3134 or NC3131 Fast Ethernet adapters, Compaq has the only industry-standard, scalable transition path from Ethernet to Fast Ethernet to Bonded Fast Ethernet to short haul fiber Gigabit.

Optional Upgrade Modules:

**NC6133 1000 LX Upgrade Module**

338456-B24

**NC3135 Dual 10/100 Upgrade Module**

138604-B21

**NC3133 100 FX Upgrade Module**

338456-B25

**NC3132 Dual 10/100 Upgrade Module**

338456-B22

Fast Ethernet Server Adapters:

**NC3134 Fast Ethernet NIC 64 PCI Dual Base 10/100**

138603-B21

**NC3131 Fast Ethernet NIC 64 PCI Dual Base 10/100**

338456-B21

**NC3123 PCI, 10/100 WOL**

174830-B21

Gigabit Server Adapters:

**NC7131 Gigabit Server Adapter PCI, 64/66, 10/100/1000-T**

158575-B21

**NC6136 Gigabit Server Adapter PCI, 64/66, 1000-SX**

203539-B21

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#### Introduction

With the Compaq NC6132 Gigabit Upgrade Module, Compaq offers the industry's only modular approach to adding a Gigabit network connection to servers without having to replace the base adapter.

The NC6132 is a 1000 SX Upgrade Module for the NC3134 and NC3131 Fast Ethernet adapters. This upgrade module provides a scalable transition from Ethernet to Fast Ethernet or Bonded Fast Ethernet to Gigabit and provides three high-speed network connections through one server slot.

### Performance

#### 32-/64-bit Bus-mastering

The NC6132 offers the highest data transfer method available between a network and a server for high performance and low CPU utilization. The NC6132 operates in 32- or 64-bit PCI slots and uses bus-mastering technology to maximize throughput and minimize CPU utilization.

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#### Port Bonding

Transmit Load Balancing (TLB) and Switch-Assisted Load Balancing (FEC/GEC/802.3ad static-mode configuration only) are two port-bonding methods supported by the NC6132. TLB provides both failover and balancing of transmit traffic across all adapters for increased performance. For even higher performance, Switch-Assisted Load Balancing (SLB) provides port failover and balancing of both transmit and receive traffic across all adapters when connected to a switch that supports this feature.

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#### Jumbo Frames

Jumbo Frames (also known as Extended Frames) offer a 9K byte Maximum Transmission Unit (MTU), which is six times the size of traditional Ethernet frames. Like all Compaq Gigabit server adapters, the NC6132, supports jumbo frames as a way to achieve higher throughput and better CPU utilization when deploy in a network infrastructure that supports them. Jumbo frames are particularly useful for database transfers and tape backups.

### *Ease of Use*

#### **Plug and Play**

Fully compliant with the 2.1 PCI specification, the NC6132 uses the system resources to automatically configure its memory and interrupt settings.

### *Security/Reliability*

#### **Network Fault Tolerance (NFT)**

The Network Fault Tolerance feature of the NC6132 ensures that the server can always keep an active link. Using either of the ports on the base adapter or after installing a second, compatible adapter, if the primary network connection fails, the second, backup adapter will automatically take over, retaining the network connection. The NC6132 can be configured to fail over to any NC31xx, NX61xx, or NC71xx adapter by using the latest drivers.

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#### **PCI Hot Plug**

The NC6132 includes PCI Hot Plug support that enables PCI networking controllers to be replaced or added to a PCI Hot Plug compatible server without powering down the system. This feature provides increased system availability and non-stop serviceability in business-critical computing environments. The NC6132 plugs into the NC3134 or NC3131 Fast Ethernet adapters without requiring any tools.

### Network Management

#### Standards-based

The NC6132 supports the following Compaq Management tools and industry network management standards:

- Compaq Insight Manager
  - Compaq Insight Manager XE
  - SNMP
  - DMI 2.0
  - Web-Based Enterprise Management (WBEM)
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#### Server Integration

Compaq's SmartStart configuration utility includes setup support for the NC6132 so that it can be configured as part of the SmartStart configuration process. Compaq Insight Manager or Compaq Insight Manager XE can recognize the NC6132 individually or in port bonded teams, and can collect and report SNMP statistics on the server adapter events. Compaq Network Management System (CNMS) can also collect and report SNMP statistics on server adapter events.

Integrated Management Log (IML) support is provided by the NC6132 for critical event logging on Compaq servers.

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#### Configuration Utilities

Each NC6132 ships with a suite of OS-tailored configuration utilities that allow the user to run initial diagnostics and configure adapter teams for Network Fault Tolerance, Transmit Load Balancing, or Switch-Assisted Load Balancing (FEC/GEC/802.3ad static-mode configuration only) in the Windows 2000 and Windows NT operating systems.

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#### Diagnostic LED Indicators

For each port, LED Indicators show link integrity and network activity "at-a-glance" for easy troubleshooting.

### Technical Specifications

#### General Specifications

Communications Processor	Intel 82542
On-board memory	Full-duplex
Data path	64 KB
Interrupt levels	32- and 64-bit/33MHz
Bus architecture	INTC
Connector	PCI bus-mastering
Wavelength	SC
Distance	SX = 850nm
Wiring	Up to 1,804 ft/550 m
Dimensions (LxW)	Multi-mode fiber (50mm and 62.5mm) 6.5 x 2.5 in/16.5 x 6.4 cm

IEEE 802.3z compliant 1000 Mbps Ethernet specification  
64-bit addresses for systems with more than 4 GB of physical memory  
64-bit PCI host interface compliant with PCI 2.1  
Command usage optimization for advanced PCI commands (MWI and memory reads)  
Additional statistics for management and RMON  
Software controlled global reset bit (resets everything except PCI configuration registers)

#### Power and Environmental Specifications

<b>Operating</b>	Temperature	32° to 131°F/0° to 55°C
	Humidity	10% to 90%
<b>Non-operating</b>	Temperature	-85° to 185°F/-65° to 85°C
	Humidity	5% to 95%
<b>Power requirement</b>	1025 mA @ 5V maximum	
<b>Emissions Standards</b>	FCC Class A	
	FCC Class B	
<b>Safety Compliant</b>	CE Mark	

#### Operating System Support

Windows 2000  
Windows NT 4.0  
Windows NT 3.51  
Novell NetWare 5.x Server  
Novell NetWare 4.x Server  
Novell NetWare 3.x Server  
SCO UnixWare 7.x  
SCO OpenServer 5.x  
SCO UnixWare 2.1  
OS/2 Warp Server

#### Kit Contents

NC6132 upgrade module hardware  
CD-ROM: software and documentation  
Quick Install Guide  
Product warranty statement

### Technical Specifications

Software Feature Support by Operating System	FEATURE	Windows 2000	Windows NT 4.0	Linux 32-bit	UnixWare 7.x	Open Server 5.x	NetWare 3.12, 3.2 Server	NetWare 4.11 Server	NetWare 5.0 Server
	NFT	*	*		*	*		*	*
	PCI Hot-Plug	*(1)	*(1)					*	*
	Configuration Utility	*	*				*	*	*
	DMI 2.0	*	*				*	*	*
	SNMP	*	*	*			*	*	*
	Unattended Install	*	*				*	*	*
	SmartStart		*	*			*	*	*
	WBEM	*	*	*	*	*	*	*	*
	Compaq Insight Manager Compaq Insight Manager XE	*	*	*	*	*	*	*	*
	IML	*	*	*	*	*	*		

(1) Windows 2000: Hot Plug add/replace; Windows NT 4.0: Hot Plug replace only

### Warranty

**Maximum:** The remaining warranty of the Compaq server product in which it is installed (to a maximum of a three-year limited warranty).

**Minimum:** One-year, on-site limited warranty.

**NOTE:** Certain restrictions and exclusions apply. In North America, call 1-800-OK-COMPAQ; outside of North America, please contact your customer service center.

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